



# Wildlife Conservation Corps Citizen Scientist Opportunities

## Calling All Amphibians

The ENSP is actively recruiting new volunteers to participate in a statewide Calling Amphibian Monitoring Program (CAMP). The object: to assess the distribution, abundance, and health of New Jersey's amphibians. CAMP is part of a larger initiative called the North American Amphibian Monitoring Program (NAAMP); the data collected in N.J. will be submitted into the national database.

Volunteers will conduct roadside surveys for calling amphibians along designated routes throughout the state. Each 15-mile route will be surveyed three times during spring 2003. Survey results will provide ENSP and the U.S. Geological Survey with valuable data on the state's calling amphibian populations. The nature of the data collected during these surveys will be fundamentally different than what is collected during traditional Herp Atlas surveys.

People currently involved in the Herp Atlas Project would be ideal CAMP volunteers. To aid them, all participants will receive a free CD of "Calls of New Jersey Frogs and Toads."

Volunteers are also needed for the Herp Atlas Project, an ongoing effort that uses a different methodology to assess the populations of reptiles and amphibians.

To volunteer for either, contact Larissa Smith at (609) 628-2103, or by e-mail: [llsmith@gtc3.com](mailto:llsmith@gtc3.com)

## Vernal Pool Investigations

The ENSP has launched a multi-year project to map and certify the thousands of New Jersey's vernal pools. You need to be willing to devote at least 40 hours this spring to survey these seasonal wetlands near you for breeding salamanders and frogs.

For more information, or to volunteer, e-mail [vernalpools@yahoo.com](mailto:vernalpools@yahoo.com) or call 908-735-8975.

## Wildcat Ridge Hawk Watch

From February through May, a hawk watch will be conducted at the Wildcat Ridge Wildlife Management Area in Morris County. Coordinator Bill Gallagher needs volunteers to help staff the seven-day-a-week count. A basic knowledge of birds is required; Gallagher will train interested volunteers, who will record sightings and weather data. Contact Larissa Smith at 609-628-2103 or [llsmith@gtc3.com](mailto:llsmith@gtc3.com)



Leopard frog (above), wood frog.



WITH YOUR  
**INCOME TAX**  
**CHECK-OFF**  
SUPPORT  
NJ WILDLIFE

When you complete your state income tax form this year, don't forget New Jersey's wildlife. Conserve Wildlife tax check-off contributions made by citizens like yourself are one of the most important funding sources for the Endangered and Nongame Species Program.

The ENSP, which receives relatively few state tax revenues, depends mightily on the tax check-off and a portion of the Conserve Wildlife license plate fees to fund the work that you read about in this newsletter. In fact, the tax check-off and license plate fees are our two biggest sources of revenue. Unfortunately, contributions to both have been declining due to competition from other tax check-off and license plate options. Since 1991 the ENSP's revenue from the state income tax check-off declined more than half.

Which makes it more important than ever for you -- in order to keep New Jersey's wildlife in our future -- to check off for wildlife when you complete your return this year.

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Endangered & Nongame Species Program  
Division of Fish & Wildlife  
PO Box 400  
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## Conserve Wildlife Foundation News

MESSAGE FROM LINDA TESAURO, EXECUTIVE DIRECTOR

### Get Involved! Commemorate 30 Years Of Rare Wildlife Protection

The year 2003 is an important one because it commemorates the 30th anniversary of the Endangered and Nongame Species Program and the NJ Endangered Species Conservation Act of 1973. Although the mission of conserving biodiversity and protecting habitat is a noble one, the state provides no dedicated funding to do this work. Instead, we must depend on YOU. You play a major role in protecting our state's eagles, peregrines, bobcats, ospreys, salamanders, bog turtles, and other rare wildlife every time you "Check-Off for Wildlife" on the state income tax form; buy a Conserve Wildlife license plate; and join the Conserve Wildlife Foundation of NJ as a member. Resolve this year to do your part by supporting important conservation work that will benefit you and your family for years to come.

A special thanks to the Geraldine R. Dodge Foundation for their renewed support of the Citizen Scientist volunteer program and to the NJ Natural Lands Trust for their grant supporting Delaware Bay shorebird research. In addition, a very special thanks to the following Partners in Protection who contributed \$250 or more last year to help protect our precious wildlife:

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Nancy Bowe  
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# Wildlife

1973~2003 ENSP  
Celebrating 30 Years of Keeping New Jersey's Wildlife in our Future  
Winter/Spring 2003  
[www.njfishandwildlife.com](http://www.njfishandwildlife.com)

## State's Big Map Anti-Sprawl Plan Builds on ENSP Landscape Project

An innovative McGreevey Administration mapping approach that draws heavily upon the Endangered and Nongame Species Program's Landscape Project will align state regulations and funding programs with the State Plan.

Dubbed "The Big Map," this new approach ultimately will identify areas of the state where development will be encouraged and where growth will be strictly regulated. It was coordinated by the Department of Environmental Protection (DEP), with the Departments of Community Affairs (DCA), Transportation (DOT), and Agriculture (DOA).

"We will have one state map that we will live by and not one dollar of taxpayer money will be spent to subsidize sprawl anymore," says Governor James E. McGreevey.

The map was developed by overlaying Geographic Information System (GIS) data for natural resources, existing development, infrastructure availability and state planning areas. The GIS data includes endangered and threatened species habitat data developed by the ENSP as part of the unique Landscape Project the Division of Fish and Wildlife program began nearly a decade ago.

"For the Landscape Project to form a significant basis for such comprehensive action is both humbling and exciting," says Larry Niles, ENSP chief. "We anticipated the need for such a comprehensive view and everybody associated with the ENSP has been working hard for years in order to make it a reality."

The "Big Map" creates three regulatory categories: green, yellow and red areas.

Smart growth areas, urban and metropolitan areas where the state wants to encourage development and channel growth, will be colored green. In these areas, the state will streamline and expedite the regulatory permitting process and dedicate funds for infrastructure and parks.

Yellow areas indicate a cautious approach to growth.

Critical natural resource areas are colored red. The state has set the regulatory bar higher in these areas and will exact

strict regulatory standards to limit growth. The vast majority of New Jersey's remaining wetlands and contiguous forests fall into these red areas. Critical natural resource areas include dedicated open space and farmland preservation lands, endangered and threatened species habitat, high quality waters designated Category One (C1), and other environmentally sensitive areas.

"Controlling sprawl means not only saying 'no' to development in certain places, but also saying 'yes'

to development elsewhere," says DEP Commissioner Bradley M. Campbell. "Working with our mayors, county officials and other community leaders, we must plan now to provide attractive, affordable, and environmentally sound places for people to live. This map provides builders and planners with a transparent, predictable guide for where the state will encourage and support development."

The administration will propose the map for formal regulatory adoption this spring, after which time there will be an official 60-day public comment period. DEP is providing an online discussion board for individuals and groups to view the map and to offer input or raise concerns.



The Big Map incorporates data from bobcats and many other species.

FOR MORE INFORMATION: [WWW.STATE.NJ.US/DEP/](http://WWW.STATE.NJ.US/DEP/)

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**ENDANGERED AND NONGAME SPECIES PROGRAM MISSION**  
"To actively conserve New Jersey's biological diversity by maintaining and enhancing endangered and nongame wildlife populations within healthy functioning ecosystems."



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## Red Knot Decline Calls For A New Approach

Message from Larry Niles, Chief, ENSP

The plight of the red knot, one of the main shorebird species that migrates through the Delaware Bay each spring, continues to be bleak. Six years ago they were gaining more than 8 grams a day, now they only gain 2 grams per day, and many no longer are able to reach the threshold weight they need to fly to the Arctic and breed. On their Tierra del Fuego wintering grounds, their numbers have plummeted.



Red knot on Arctic breeding grounds.

A distinguished group of international shorebird biologists have attributed the decline to the overharvest of horseshoe crabs on the Delaware Bay. Hopefully, the latest evidence will lead to meaningful change -- perhaps a moratorium on the crab harvest or even a federal listing of the species.

Despite years of warnings, however, how did this happen? How did one of the most famous and important bird stopovers in the world decline so ignominiously while shorebird and marine biologists, birders, conservation agencies and groups watched?

There have been a number of key factors. Because the horseshoe crab harvest only generates several millions of dollars a year, it's been a minor issue for the Atlantic States Marine Fish Commission. Initially most of the state agencies that comprise ASMFC knew virtually nothing about the crabs, and the speed with which the harvest escalated during the past decade outstripped the ASMFC's ability to develop a suitable regulatory response.

These agencies also never tried to assess the impact of the harvest on the crabs; they kept insisting that shorebird biologists needed to prove the harvest of the crabs was hurting the shorebirds that feed upon their eggs. That, unfortunately, led to debates between shorebird biologists. By the late 1990s, ENSP staffers, among others, were convinced the evidence pointed to a shorebird decline caused by the harvesting of the crabs for conch bait. Others, however, argued against changes in the crab harvest until the link could be conclusively proved.

Meanwhile, most of the U.S. conservation community and other government agencies -- with the exception of the American Bird Conservancy and National and New Jersey Audubon -- had limited impact. And while the shorebird migration has attracted considerable local and national media attention, both print and electronic, too many of the stories have focused on the wonder of the birds and their migration, and not on the detrimental effects of the crab harvest.

The red knots have also been hurt by this country's approach to bird conservation. In this country, bird banding -- such as the unrivaled 25,000 shorebirds the ENSP has banded during the past six years -- has become so professionalized that most volunteers cannot do it. However, in countries such as England and the Netherlands, I learned during a trip last fall, a virtual army of volunteer banders supplies most of the data to government agencies. The result: much more data and many more committed front-line conservationists.

This year we will begin several new projects that will mimic the methods of the British Trust for Ornithology. Working with N.J. Audubon, we will seek to expand all volunteer monitoring programs, wrest control of banding from the professionals and begin the long road to creating a solid corps of volunteer monitors and banders who will make sure such a regrettable, unnecessary decline never happens again.

## ANNUAL REVIEW OF THE STATUS OF SOME OF THE WILDLIFE POPULATIONS THE ENSP WORKS WITH:

**Bald eagles:** Record number of nesting pairs (34), active nesting pairs (28) and young (36).

**Ospreys:** Healthy productivity average of 1.5 fledglings per nest.

**Peregrine falcons:** Net gain of 1 nest, to 18, including one historic return to NJ cliffs.

**American oystercatcher:** First ever winter survey yields nearly 1,000 birds.

**Allegheny woodrats:** State's lone population continues to thrive at base of the Palisades, with a record sample trapping last fall.

**Bog turtles:** ENSP managing or restoring habitat at 50 sites.

**Piping plovers:** A record 138 nesting pairs, but bad weather reduced productivity.

**Timber rattlesnakes:** Number of new dens located in Pinelands, but still under significant development pressure on private lands there.

**Freshwater mussels:** Generally imperiled, but live dwarf wedgemussels and brook floaters found in NJ last year.

**Shorebirds:** Red knots on Delaware Bay and S. American wintering grounds rapidly declining.

**Eastern tiger salamanders:** Last year's drought dried up many vernal breeding pools.

## Butterflies, Mussels Listed E&T

Following careful scientific reviews by expert panels, six butterfly and seven freshwater mussel species have been added to the state's endangered and threatened lists. This brings to 73 the total number of species currently protected by the N.J. Endangered Species Conservation Act. "Only a handful of states have listed invertebrate species on their own, independent of federal action, and now New Jersey is one of them," says Dave Golden, senior ENSP biologist.



Senior ENSP zoologist Jeanette Bowers-Altman searching for freshwater mussels.

Habitat loss is a major reason for the decline of the butterfly species, seven of which are now state protected. "Some of the species frequent wetlands, which are declining, and others favor early successional stages, such as grasses, that require periodic fires, which have been suppressed," explains Golden.

Among the most imperiled of species, 12 freshwater mussels are native to New Jersey. With this latest action, eight of them are now considered endangered or threatened. "Freshwater mussels are one of the most rapidly declining animal groups in the country," says Jeanette Bowers-Altman, senior ENSP zoologist. "They have low tolerance for pollutants which makes them excellent indicators of water quality and they are threatened by habitat degradation, introduction of exotic species like the Asiatic clam and dams."

Last year, however, the state's Integrated Biological Aquatic Assessment (IBAA) team, which is funded through the DEP's Office of Science and Research, found both previously listed endangered live dwarf wedgemussels in the Pequest River and just-listed endangered brook floaters in Somerset County's Lamington River. Because of their endangered status, the IBAA can propose upgraded classifications for the streams, which would result in stronger protection measures for the waterways.

Currently the ENSP also is reviewing the status of dragonfly, damselfly and fish species in the state.

### NEWLY LISTED SPECIES:

#### BUTTERFLIES

**ENDANGERED**  
Appalachian Grizzled Skipper, *Pyrgus wyandot*  
Arogos Skipper, *Atrytone arogos arogos*  
Bronze Copper, *Lycaena hylus*

**THREATENED**  
Checkered White, *Pontia protodice*  
Frosted Elfin, *Callophrys irus*  
Silver-bordered Fritillary, *Bolaria selene myrina*

#### FRESHWATER MUSSELS

**ENDANGERED**  
Brook floater, *Alasmidonta varicosa*  
Green floater, *Lasmigona subviridis*

**THREATENED**  
Yellow lampmussel, *Lampsilis cariosa*  
Eastern lampmussel, *Lampsilis radiata*  
Eastern pondmussel, *Ligumia nasuta*  
Tidewater mucket, *Triangle floater*  
Triangle floater, *Alasmidonta undulata*

## Watchable Wildlife

### Whittingham Wildlife Management Area Sussex County

The headwaters of the Pequest River include extensive freshwater marsh and diverse upland forests and fields. The wetlands harbor beaver, river otters, wood ducks, black ducks and mallards, as well as snapping, wood and eastern painted turtles. The fertile limestone valley is also home to many amphibians, including wood frogs, spring peepers, American toads and spotted salamanders.

**Directions:** From the junction of US Rt. 206 and County Rt. 611, take CR 611 west about 1 mile, to wetland overlook on right. From there, go back to US 206 and turn left. Take the next left onto CR 618 for 1.4 miles. Turn left onto Springdale Rd. and go .2 mile to parking area on left. Trail from lot goes through natural area to Big Spring wetlands.

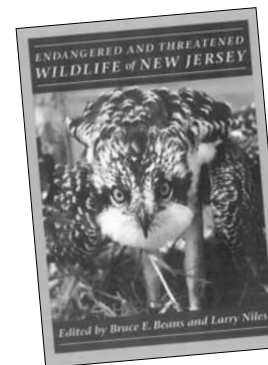
**Information:** NJ Division of Fish and Wildlife, 973-383-0918.

### Dennis Creek Wildlife Management Area

The upland edge of one of the finest salt marshes in the state has some of the best birding along the coast of the Delaware Bay. Stop frequently along Jake's Landing Road to look and listen for spring songbird migrants. Look for northern harriers and short-eared owls hunting over the marsh. Listen for the *kek-kek-kek-kek* call of the clapper rail.

**Directions:** From the intersection of NJ Rt. 47 and County Route 557 in Dennis Township, travel 0.3 miles south to Jake's Landing Road. Turn right and proceed 1.5 miles to parking lot, boat ram and Dennis Creek.

**Information:** NJ Division of Fish and Wildlife, 856-629-0090.



## E&T Book Is Coming Soon

This spring, look for *Endangered and Threatened Wildlife of New Jersey*, a richly illustrated color guide to the state's 73 most imperiled species. It's published by Rutgers University Press and written by the people who know these species best -- the biologists of the ENSP.

## Schedule Your Speakers Bureau Program Now

The Speakers Bureau offers interested groups a new, completely updated slide presentation and discussion on ENSP's efforts to research, manage and protect endangered and threatened species in New Jersey.

More than 50 trained NJ Division of Fish and Wildlife - Wildlife Conservation Corps volunteers are available to conduct the informative half-hour presentation geared toward adult audiences.

For more details, or to schedule a speaker for your group, please contact Terry Terry at (609) 628-2103, or by e-mail at [nongame@gtc3.com](mailto:nongame@gtc3.com).

## February

### Third week:

■ Eastern tiger salamanders lay eggs

■ in vernal ponds

### Last week:

■ Bald eagles begin laying eggs

## March

### First week:

■ Peepers (small treefrogs) and wood frogs begin calling (could be earlier or later, depending on weather)

### Third week:

■ Piping plovers begin arriving on beaches

■ Barred owls court and begin to nest

■ Ospreys return to N.J.

### Last week:

■ Bald eagle chicks begin to hatch

■ Great blue herons and egrets

begin arriving at rookeries

## April

### First week:

■ Ospreys begin nesting

■ Piping plovers begin courting and setting up territories

■ Upland sandpipers return and begin nesting in grasslands and pastures

### Second week:

■ Hibernating butterflies begin to appear

■ Hummingbirds arrive

### Third week:

■ Coastal herons and egrets begin nesting

■ Piping plovers being incubating eggs

■ Songbirds begin nesting

■ Migrating shorebirds begin

arriving on Delaware Bay

### Last week:

■ Timber rattlesnakes start emerging

from their winter dens

